

Group 6 - INFO2009 Coursework 2 - Radio Interview Script

Presenter: Welcome back to ITO Radio! <jingle> It's now time for our regular 'ask an expert' slot, and for this we welcome our special guest Fred to the studio! <applause> Now, Fred, you are a student with a tricky academic problem, right?

Student: Yep, indeed I am.

Presenter: OK, so Fred has a puzzle to solve and, because we're nice here at ITO Radio, we want to help him sort it out. For this I can now introduce our resident expert, he's the man with all the answers - Professor Dominic McGill! <applause> Welcome Professor. OK then Fred, fire away...

Student: Right then, hello professor.

Expert: Hi there Fred.

Student: OK, so I am doing a project that may require me to collect and store information about fellow students. Are there any issues I need to be aware of?

Expert: Yes, this sounds like an interesting project, but because you plan to store personal data you must take the issue of data security very seriously.

Student: Security? Does that mean I have to lock the data away? How am I supposed to do that?

Expert: Data security measures can be implemented at both a physical and a virtual level. Of course it is important that your PC is difficult to access, and you should remember to lock doors and windows and keep the machine out of view in order to deter thieves. However, some criminals don't need to steal the actual machine before they can access your data.

Student: Yeah, I've heard about 'hackers'. What do they do?

Expert: Hackers are able to force their way in to computers over networks or the internet, often with the intent of using the data stored on the target machine for malicious purposes, or for their own ends. Sometimes hackers will hide malicious software, or malware, within download files or email attachments, which is released when the seemingly-legitimate files are opened on the user's machine. This software can then transmit the contents of the user's files to the hacker.

Student: Ok, that sounds bad. What can I do to protect my data?

Expert: Well actually there are quite a few things you can do. Firstly, make sure you have a good piece of security software installed on your pc. This should provide you with adequate firewall protection against malware such as spyware, trojans and viruses, and most will scan your machine every so often to check for these kinds of infections. Today's modems and routers also tend to have their own firewalls built in to their software. The more layers of protection the better!

Student: OK well I already have that kind of stuff already, I think most people today know they need antivirus software...

Expert: Maybe so, but there's more. One of the best ways of securing data is to store it in a format that no one else is able to read. This is called encryption, and is a technique widely used by all sorts of organisations that store or transmit sensitive data. Banks use it to protect the identities of their clients, online retailers rely on it to hold credit card details and addresses of their customers, and the military may require extra strong encryption to transmit intelligence, where national security may be at stake.

Student: So how would I actually go about encrypting my data?

Expert: In a small-scale project or organisation, encryption is best achieved using commercial software. In order to decipher an encrypted file the user must have the pass key, which is specified at time of encryption. In theory, it should be fine for anyone to access the encrypted file, because so long as they don't have the pass key, they should not be able to decipher it.

Student: Fair enough, but this is only a small university project. Why should I be bothered about data security?

Expert: You are going to be handling the personal details of people who have given the information you required on the understanding that it would only be used for your project.

When you hand your personal details over to a company or other organisation, you would expect them to take steps to safeguard against the possibility of that data falling into the wrong hands - especially if that data included confidential medical or financial details. You would also not expect them to share your data with third parties without your consent.

Aside from the moral implications of freely sharing personal data with third parties who might not use the data with such good intent as the original holder, it is now a legal requirement thanks to the Data Protection Act that companies who hold personal data keep it secure and do not share the data without the subject's consent.

Because of this whether or not you really care about data protection, you have a duty to keep any personal data you are holding for use in your project secure. There is always the possibility, however unlikely it may seem, that the data will be lost or stolen. If this does occur, you would be liable for damage claims by the data subjects if they decided to sue over the loss of their information.

Student: What is the Data Protection Act?

Expert: The 1998 Data Protection Act is UK legislation which specifies the ways in which information about living people may be used. The act applies to everyone who wishes to handle personal information, from the large national retailer right down to the self-employed painter and decorator,

and even students such as yourself! The legislation exists mainly to protect people against the misuse of their personal information.

Student: Wow, if this stuff is the law then you'd better tell me what the Data Protection Act says I should do...

Expert: OK, so the act is broadly based on eight key principles, which I shall try to explain, hopefully as succinctly as possible. Firstly, data must be fairly and lawfully processed. This means that individuals must give their permission for their personal data to be processed, and must be informed of who is processing their data and for what purpose. Secondly, data should be processed for limited purposes. What do I mean by this? Basically, data controllers need to inform the Information Commissioner of what data is being collected and must provide a valid reason for requiring the said data. The data must not then be used outside this purpose. The third...

Student: (interrupts) Er, sorry...um, what is a data controller?

Expert: OK, sorry, I should have mentioned this before. The data controller is someone who determines how personal data is to be processed, and for what reason. This role should not be confused with that of the data processor, who is the person responsible for the actual processing of the data on behalf of the controller. Data processing includes the acts of obtaining and storing data, as well as using or manipulating it.

Student: Thanks, it's good to get the terminology straight.

Expert: No problem. Carrying on, the third principle is that stored data should be adequate, relevant and not excessive. This is to ensure that organisations do not hold more information about an individual than is necessary for its needs, for example an online retailer obviously requires your address but is unlikely to need to know your religion or marital status. The fourth principle concerns accuracy, in that the stored data should be correct and kept up-to-date. This is not always easy for organisations to observe, as it relies mainly on the data subject to inform the data controller of any change in status. Organisations can remind and prompt the subject to pass such information, but cannot guarantee a response. Though the data needs to be current, it should also not be kept longer than necessary, in other words, it should be securely destroyed once the purposes for which it was obtained have been fulfilled.

Student: All these regulations seem like a lot of red tape to me!

Expert: In your project you are taking the role of the data commissioner, and so keeping tabs on these regulations may seem like a big hassle. However, say you were to take part in someone else's project as a data subject, you might well then be a lot more concerned about how your personal data was being used! Remember, almost everybody is a data subject, even from birth, so it is of a common interest that these principles are upheld!

Student: Very true, I'd never thought of it like that before. OK, so what are the final three principles?

Expert: Right, the sixth principle concerns data being processed in accordance with the rights of the data subject.

Student: And what rights do I have then?

Expert: You have more rights than you may think. Data subjects can request to view the data which is being held relating to them, as well as demanding that data be erased or edited if it is inaccurate. However, beyond this, the subject should know the reasons for the data being held, how it was originally obtained and to whom it has, or may be, disclosed. The act also gives data subjects the right to stop personal data being processed if it has the potential to result in damage or distress. If the subject suffers any kind of harm as a result of their data being processed in violation of the act, he or she is entitled to seek compensation from those parties involved.

Student: It seems that data subjects are protected very well under this act. Data controllers must have a stressful job!

Expert: Maybe so, but that's what the DPA is all about - protecting the interests of the data subject. OK, the seventh principle is that data must be kept secure, and we have already discussed how this can be done. Many companies focus heavily in this aspect of the act, investing large amounts of money in physical security facilities, including specialist personnel. The overall aim here is that data is protected against unlawful access, processing, loss or damage. Finally, and although this may not apply in the case of your project, data should not be transferred to other countries without an adequate level of protection. This is primarily intended to protect subjects from having their data sent to areas where there may be no regulation over its usage. You should take note that if you visit a website hosted in a country where there is no equivalent legislation then the DPA will not cover your data protection rights.

Student: OK, cheers, I now understand why I need to think about data protection in my project. As a data subject I want my details to be used carefully, and as a controller I want to stay on the right side of the law! Is there anywhere else I can find information about the act?

Expert: Ok, so one of the best places to find information on the Data Protection Act is online. The government have several websites including ico.gov.uk - the website of the Information Commissioners Office - and legislation.gov.uk, where common questions that people have about the DPA are answered.

Through the ICO website, you can also find out more details on how the Data Protection Act applies to you as a student, and how you can make a formal request to an organisation that is holding your data. You can also find how to respond if someone who you have gathered information from makes such

a request to you. [Legislation.gov.uk](http://legislation.gov.uk) can provide you with a complete transcript of the Act itself.

Presenter: OK, thanks very much Professor, I'm afraid we'll have to call time on today's discussion but it's been really great to get some direction about data protection! Thank you Fred for bringing your problem to the table and sharing it with the world...

Student: No problem.

Presenter: Exactly, not any more, thanks to the Professor! Don't forget to send in your questions for next week's show and we'll try to answer as many as we can. <jingle>